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| 10/581,988                              | 06/07/2006  | Hiroshi Yamada       | 10873.1901USWO      | 1932             |
| 52835                                   | 7590        | 07/31/2009           | EXAMINER            |                  |
| HAMRE, SCHUMANN, MUELLER & LARSON, P.C. |             |                      | HUANG, CHENG YUAN   |                  |
| P.O. BOX 2902                           |             |                      | ART UNIT            | PAPER NUMBER     |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**ATTACHMENT TO ADVISORY ACTION**

***Response to Arguments***

1. Applicant's arguments filed 20 July 2009 have been fully considered but they are not persuasive.
2. Applicant made amendments to claims 2 and 3 to overcome U.S.C. 112, first paragraph rejections of record, with the exception of claim 11.
3. Applicant argues that claim 11 is fully supported in the originally filed disclosure in light of Table 1. However, specific values recited in Table 1 still does not provide support for the claimed range of 0.18 N to 0.26 N which includes every value between 0.18 N and 0.26 N.
4. Applicant argues that, in addition to failing to teach a mixture of polyimide resin and fluorine resin, Nakajima fails to "describe heating to a temperature exceeding a melting point of a fluorine resin particle." It is agreed that Nakajima fails to teach the claimed limitations. However, it is also noted that the limitation "wherein the mixture component is heated and cured at an outer face of a core wire at a temperature exceeding a melting point of the fluorine resin particles" is a method limitation that does not determine the patentability of the product, unless the process necessarily results in articles that are structurally or compositionally distinguishable from those of the prior art. Yamamoto et al. is used to teach the deficiencies of Nakajima, namely, a mixture of polyimide resin and fluorine resin particles of which melt and are precipitated on at least one face of the structure while also being contained inside the polyimide resin (col. 6, lines 5-14, Figs. 3A and 3B).

5. Applicant argues that Yamamoto et al. fails to “disclose or suggest heating to a temperature exceeding a melting point of the fluorine resin particles.” However, the claimed limitation is a process limitation, as discussed above. Since the resulting structure of Yamamoto et al. meets that of the presently claimed invention, the process limitation of the mixture component being heated and cured, etc. does not determine the patentability of the product. The fluorine resin particles of Yamamoto et al. precipitate to at least one face of the structure and also are remain inside the polyimide resin, as is structurally claimed.

6. It is noted that “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process”, *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Further, “although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product”, *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983). See MPEP 2113.

7. Therefore, absent evidence of criticality regarding the presently claimed process and given that Nakajima in combination with Yamamoto et al. meets the requirements of the claimed tube, Nakajima in combination with Yamamoto et al. clearly meets the requirements of present claims.

8. Applicant argues that “there is no reasonable suggestion that Yamamoto et al. would enjoy the benefits that can be achieved by the claimed invention, such as improved contact

angles, since the reference fails to disclose heating to a temperature exceeding a melting point of the fluorine resin particles." Although Yamamoto et al. fails to explicitly disclose contact angles, given that the combination of Nakajima and Yamamoto et al. discloses a product identical to the one presently claimed, it is clear that the product of Nakajima as modified by Yamamoto et al. would intrinsically possess improved contact angles.

### *Conclusion*

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHENG YUAN HUANG whose telephone number is (571) 270-7387. The examiner can normally be reached on Monday-Thursday from 8 AM to 4 PM.
10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho, can be reached at 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. H./

Cheng Yuan Huang  
Examiner, Art Unit 1794  
July 28, 2009

/Callie E. Shosho/  
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